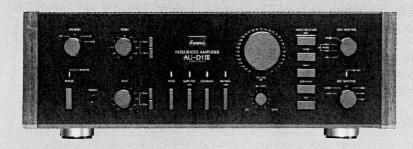
SERVICE MANUAL

INTEGRATED AMPLIFIER

SANSUI AU-D11II



CAUTION

- Parts identified by the symbol on the schematic diagram and the parts list are critical for safety. Use only replacement parts that have critical characteristics recommended by the manufacturer.
- Make leakage-current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit before returning the appliance to the customer.



SANSUI ELECTRIC CO., LTD.

•SPECIFICATIONS

Power output
Min. RMS, both channels driven, from 10 to 20,000 Hz, with
no more than 0.0028% total harmonic distortion.
130 watts per channel into 8 ohms.
Load impedance 8 ohms
Total harmonic distortion
less than 0.0028% at or be-
low rated min. RMS power
output
Intermodulation distortion
(60 Hz; 7 kHz=4:1 SMPTE method)
less than 0.0028% at rated
power output
Frequency response (at 1 watt)
Overall (from AUX) DC to 300,000 Hz, +0 dB
—3.0 dB
RIAA curve deviation (DISC-MM, 20 Hz to 20 kHz)
+0.2 dB, -0.2 dB
Input sensitivity and impedance (at 1 kHz)
DISC-MC-HIGH 250 μV/40 ohms
DISC-MC-LOW 70 μV/3.2 ohms
(Max. input capability (LOW): 25 mV at 1 kHz, less
than 0.01% total harmonic distortion)
DISC-MM 2.5 mV/47 kilohms
(Max. input capability; 200 mV at 1 kHz, less than
0.01% total harmonic distortion)
DISC-DA 150 mV/47 kilohms
AUX, TUNER, TAPE PLAY-1, 2
Output level (1,000 Hz)
TAPE REC-1, 2 150 mV into 47 kilohms
Signal to noise ratio (short-circuit, A-network)
DISC-MC 80 dB
DISC-MM
AUX, TUNER, TAPE PLAY-1, 2
110 dB
Controls and Filter
BASS ± 10 dB at 50 Hz
Tone selector 125 Hz, 250 Hz
TREBLE ± 10 dB at 10 kHz
Tone selector 3 kHz, 6 kHz
SUBSONIC —3 dB at 16 Hz (6 dB/oct) MUTING —20 dB
LOUDNESS +8 dB at 50 Hz
(VOLUME: -30 dB +6 dB at 10kHz
position)
Power requirements
Power voltage 120/220/240V (50/60 Hz)
For U.S.A. & Canada
120V (60 Hz)
Power consumption 470 watts 560 VA Rated
700 watts Maximum
Dimensions
161 mm (6-3/8") H
431 mm (17") D

Design and specifications subject to changes without notice for improvements.

431 mm (17") D

19 kg (41.8 lbs) packed

CAUTION

1. The symbols, UL, CSA, BS, UK, EU, AS and XX on the parts list and the schematic diagram mean followings respectively.

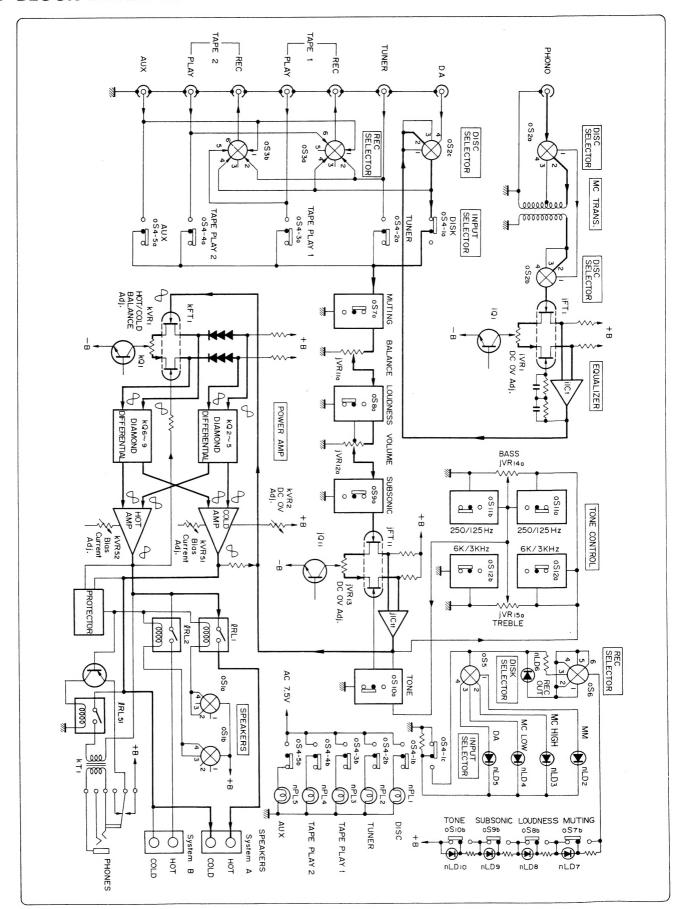
UL Manufactured for U.S.A market.
(Underwriters Laboratories approved model.)
CSA Manufactured for Canadian market.
BS, UK Manufactured for United Kingdom market.
EU Manufactured for European market.
AS Manufactured for Australian market.
XX Standard Version.
NON MARK Common Parts.

- 2. Some printed circuit boards are not supplied as the assembled. To separate these in this service manual, the stock No's are not indicated at the ends of the board names. However, the individual parts on the circuit boards are provided by orders.
- 3. Since some of capacitors and resistors are omitted from parts lists in this service manual, refer to the Common Parts List for capacitors & resistors, which was issued on February 1983.
- 4. Abbreviations in this service manual are as follows.

- Abb	reviations List		
C.R.	: Carbon Resistor	E.B.	: Bi-Polar Electrolytic
S.R.	: Solid Resistor		Capacitor
Ce.R.	: Cement Resistor	E.B.L.	: Low Leak Bi-Polar
M.R.	: Metal Film Resistor		Electrolytic Capacitor
F.R.	: Fusing Resistor	Ta.C.	: Tantalum Capacitor
N.I.R.	: Non-Inflammable Resistor	F.C.	: Film Capacitor
A.R.	: Array Resistor	M.P.	: Metalized Paper Capacitor
C.C.	: Ceramic Capacitor	P.C.	: Polystyrene Capacitor
C.T.	: Ceramic Capacitor,	G.C.	: Gimmic Capacitor
	Temoerature Compensation	A.C.	: Array Capacitor
E.C.	: Electrolytic Capacitor	V.R.	: Variable Resistor
E.L.	: Low Leak Electrolytic	S.V.R.	: Semi Variable Resistor
	Capacitor	SW.	: Switch

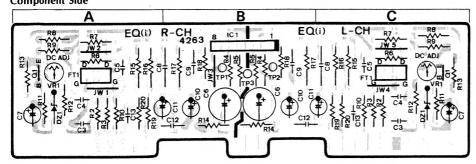
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1. BLOCK DIAGRAM



2. PARTS LOCATION & PARTS LIST

2-1. F-4263 Equalizer Amp. Circuit Board (Stock No. 00763301) Component Side



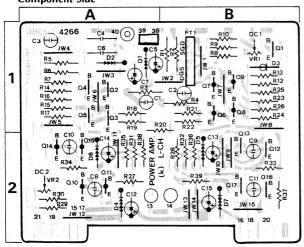
Parts List

Parts No.	Stock No.	Description	
•Transistor iQ1	46581701	2SC1845	
•FET iFT1	46723601 or 46723602	2SK389-BL 2SK389-V	
•IC iIC1	46579100	M5219L	
•Zener Diode iDZ1	46111800	05Z6.2-Y	

Parts No.	Stock No.	Description
iR15	46456100	56k Ω 1/2W C.R.
iR16	46452300	1.5k Ω 1/2W C.R.
iR17	46453500	4.7k Ω 1/2W C. R .
iC8	00414500	0.056μF 100V P.C.
iC9	00413200	0.016μF 100V P.C.
iC12	46891600	0.047μF 100V F.C.
iC13	46884300	4700pF 100V F.C.
iVR1	46726700	$200\Omega(B)$ S.V.R., DC OV Adj.

2-2. F-4266 Driver Amp. Circuit Board (Stock No. 00763401)





Parts List

Parts No.	Stock No.	Description	
Transistor			
kQ1	46581701	2SC1845	
kQ2	46581701	2SC1845	
kQ3	46581701	2SC1845	
kQ4	46581701	2SC1845	
kQ5	46581701	2SC1845	
kQ6	46581601	2SA992	
kQ7	46581601	2SA992	
kQ8	46581601	2SA992	
kQ9	46581601	2SA992	
kQ10	46728201	2SA1145	
kQ11	46728201	2SA1145	
kQ12	46728301	2SC2705	
kQ13	46728301	2SC2705	
kQ14	46728201	2SA1145	

Parts No.	Stock No.	Description
kQ15	46728201	2SA1145
kQ16	46728301	2SC2705
kQ17	46728301	2SC2705
•FET	07110000	μΡΑ68Η-L
kFT1	or 07110001	μΡΑ68Η-Μ
kD1	03401700	Varistor MV103
kD2	03401700	Varistor MV103
kD3	46445300	10YD2.4 (Constant Current)
kD4	03402000	Varistor SV04
kD5	03402000	Varistor SV04
kD6	03402000	Varistor SV04
kD7	03402000	Varistor SV04
kR1 kR2 kR3 kR4 kR5 kR6 △ kR29 △ kR30 △ kR33 △ kR34 △ kR34	46451900 46452000 46455600 46455600 46453300 46453300 46229200 46229100 46229100 46229100	1kΩ 1/2W C.R. 1.1kΩ 1/2W C.R. 36kΩ 1/2W C.R. 36kΩ 1/2W C.R. 3.9kΩ 1/2W C.R. 3.9kΩ 1/2W C.R. 150Ω 1/2W C.R. 150Ω 1/2W N.I.R. 120Ω 1/2W N.I.R. 120Ω 1/2W N.I.R. 120Ω 1/2W N.I.R.
kC3	46917800	1500pF 125V P.C.
kC4	00407400	0.033μF 100V F.C.
kC6	00407400	0.033μF 100V F.C.
kVR1 kVR2	10335700 10336100	100 Ω (B) S.V.R., HOT/COLD DC Balance Adj. 470 Ω (B) S.V.R., DC OV Adj.

2-3. F-4267 Driver Amp. Circuit Board Component Side (Stock No. 00763501)

Component Side

(Stock No. 00763501)

A

B

Component Side

(Stock No. 00763501)

A

Component Side

(Component Side

(Co

Parts List		
Parts No.	Stock No.	Description
• Transistor kQ1 kQ2 kQ3 kQ4 kQ5 kQ6 kQ7 kQ8 kQ9 kQ10 kQ11 kQ12 kQ13 kQ14 kQ15 kQ17	46581701 46581701 46581701 46581701 46581601 46581601 46581601 46581601 46728201 46728201 46728301 46728301 46728301 46728301 46728301 46728301	2SC1845 2SC1845 2SC1845 2SC1845 2SC1845 2SC1845 2SA992 2SA992 2SA992 2SA992 2SA1145 2SA1145 2SC2705 2SC2705 2SA1145 2SC2705 2SC2705 2SC2705
•FET kFT1	07110000 or 07110001	μΡΑ68H-L μΡΑ68H-Μ
kD1 kD2 kD3 kD4 kD5 kD6 kD7	03401700 03401700 46445300 03402000 03402000 03402000 03402000	Varistor MV103 Varistor MV103 10YD2.4 (Constant Current) Varistor SV04 Varistor SV04 Varistor SV04 Varistor SV04
kR1 kR2 kR3 kR4 kR5 kR6 ♠ kR29 ♠ kR30 ♠ kR33 ♠ kR34 ♠ kR34	46451900 46452000 46455600 46455600 46453300 46453300 46229200 46229100 46229100 46229100 46229100	1kΩ 1/2W C.R. 1.1kΩ 1/2W C.R. 36kΩ 1/2W C.R. 36kΩ 1/2W C.R. 3.9kΩ 1/2W C.R. 3.9kΩ 1/2W C.R. 150Ω 1/2W N.I.R. 120Ω 1/2W N.I.R. 120Ω 1/2W N.I.R. 120Ω 1/2W N.I.R.
kC3 kC4 kC6	46917800 00407400 00407400	1500pF 125V P.C. 0.033μF 100V F.C. 0.033μF 100V F.C.
kVR1	10335700	100Ω(B) S.V.R., HOT/COLD DC Balance Adj.
kVR2	10336100	470 Ω (B) S.V.R., DC 0V Adj.

2-4. F-4268 Protector Circuit Board

Component Side

(Stock No. 00763601)

PROTECTOR (2) L-CH

PROTECTOR (2) L-CH

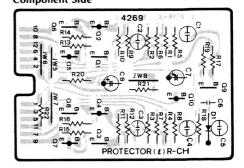
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Parts List

Parts No.	Stock No.	Description
Transistor		
IQ1	46367101	2SC2603
IQ2	46367001	2SA1115
IQ3	46367101	2SC2603
104	46367001	2SA1115
IQ5	46367001	2SA1115
106	46367101	2SC2603
107	46367001	2SA1115
IQ8	46367101	2SC2603
IQ9	46367101	2SC2603
IQ10	46367001	2SA1115
• Diode		
ID1	03117600	1S2473T77
	or 46086000	1S1588
IC6	46882700	1000pF 100V F.C.

2-5. F-4269 Protector Circuit Board

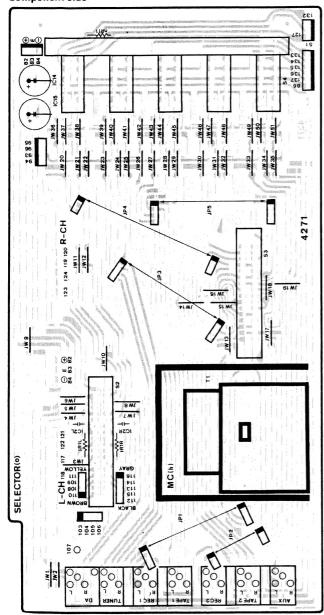
Component Side (Stock No. 00763701)



Parts List

Parts No.	Stock No.	Description
Transistor		
IQ1	46367101	2SC2603
IQ2	46367001	2SA1115
IQ3	46367101	2SC2603
IQ4	46367001	2SA1115
IQ5	46367001	2SA1115
IQ6	46367101	2SC2603
107	46367001	2SA1115
IQ8	46367101	2SC2603
109	46367101	2SC2603
1010	46367001	2SA1115
• Diode		
ID1	03117600	1S2473T77
	or 46086000	1S1588
IC6	46882700	1000pF 100V F.C.

2-6. F-4271 Input Selector Circuit Board Component Side

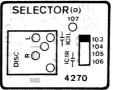


Parts List

Parts No.	Stock No.	Description
hT1 oS2 oS3 oS4	46726000 07186500 07200200 46726800	MC Head Transformer Slide SW., DISC SELECTOR Slide SW., REC SELECTOR Push SW., INPUT SELECTOR
	46684900 46685200	2P Input Terminal, DA 6P Terminal, TUENR, TAPE 1/2, AUX

2-7. F-4270 MM/MC Input Terminal Board

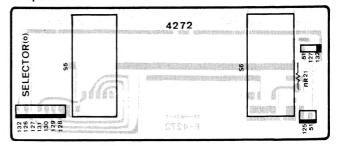
Component Side



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Pa	rts	Lis	t

Parts No.	Stock No.	Description
	46684900	2P Input Terminal Board, PHONO

2-8. F-4272 DISK & REC Selector Circuit Board Component Side

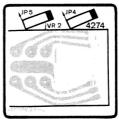


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Parts No.	Stock No.	Description
oS5	46726510	Rotary SW., DISC SELECTOR
oS6	46726610	Rotary SW., REC SELECTOR

2-9. F-4274 VOLUME Control Board

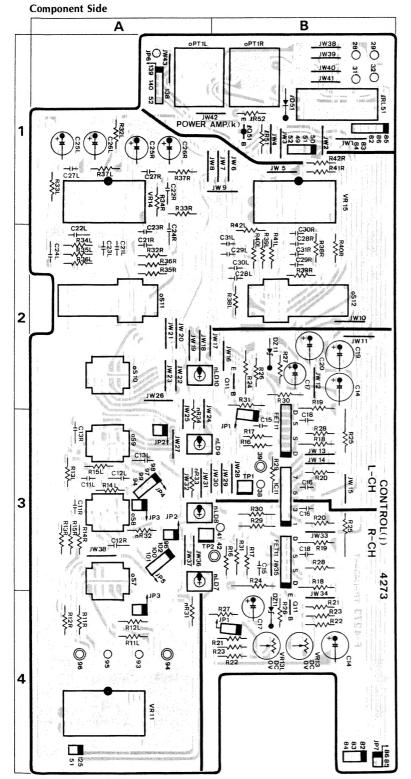
Component Side



Parts List

Parts No.	Stock No.	Description	
jVR12	46737100	100kΩ V.R., VOLUME	

2-10. F-4273 Control Amp. Circuit Board (Stock No. 00764101)

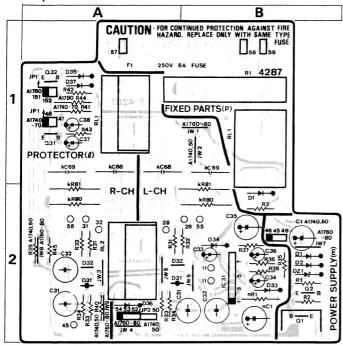


Parts List Parts No.	Stock No.	Description
•Transistor	46581701	2SC1845
•FET jFT11	07110000 or 07110001	μΡΑ68H-L μΡΑ68H-M
•IC jIC11	46579100	M5219L
•Zener Diode jDZ11	e 46111800	05Z6.2-Y
jR29 jR30 jR31	46449500 46453700 46451900	100Ω 1/2W C.R. 5.6kΩ 1/2W C.R. 1kΩ 1/2W C.R.
jC12 jC13 jC21 jC22 jC23 jC24 jC27 jC28 jC29 jC30 jC31	46887100 46886600 46885500 46887300 46887700 46887500 46886700 46882700 46884600 46882700 46884600	0.068μF 100V F.C. 0.043μF 100V F.C. 0.015μF 100V F.C. 0.082μF 100V F.C. 0.018μF 100V F.C. 0.1μF 100V F.C. 1000μF 100V F.C. 1000μF 100V F.C. 1000μF 100V F.C.
jVR11 jVR13 jVR14 jVR15	46731800 46738100 46731900 46731900	250k Ω V.R., BALANCE 100 Ω S.V.R., DC 0V Adj. 100k Ω V.R., BASS 100k Ω V.R., TREBLE
∆ kR82	46228400	33 Ω 1/2W N.I.R.
kT1	46841800	Output Transformer, PHONES
•Transistor	07197001	2SA733A
•Diode ID51	03117600	1S2473T77
IRL51	11504300 or 11504301	Relay, PHONES Relay, PHONES
nLD7 nLD8 nLD9 nLD10	46176900 46176900 46176900 46176900	LED TLS-123, MUTING LED TLS-123, LOUDNESS LED TLS-123, SUBSONIC LED TLS-123, TONE
oS7 oS8 oS9 oS10 oS11 oS12	46736800 46736800 46736800 46736800 46730600 46730600	Push SW., MUTING Push SW., LOUDNESS Push SW., SUBSONIC Push SW., TONE Push SW., BASS Push SW., TREBLE

AU-D11II

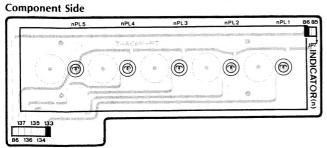
2-11. F-4287 Protector Circuit Board (Stock No. 00764501)

Component Side



Parts List			
Parts No.	Stock No.	Description	
⚠ kR80 ⚠ kR81	00185500 00185500	10Ω 2W N.I.R. 10Ω 2W N.I.R.	
kC68 kC69	46615100 46615100	0.047μF 50V P.C. 0.047μF 50V P.C.	
•Transistor IQ31 IQ32	07194801 07194801	2SC1815 2SC1815	
•IC ∆ IIC31	03609000	HA12002	
• Diode ID31 ID32 ID33	46463900 46463700 03117700	MC921 MC911 10E-2	

2-12. F-4275 Input Indicator Lamp Board



Parts List		
Parts No.	Stock No.	Description
nPL1 nPL2 nPL3 nPL4 nPL5	46730000 46730000 46730000 46730000 46730000	8V 0.1A Pilot Lamp, DISC 8V 0.1A Pilot Lamp, TUNER 8V 0.1A Pilot Lamp, TAPE PLAY 1 8V 0.1A Pilot Lamp, TAPE PLAY 2 8V 0.1A Pilot Lamp, AUX

Parts No.	Stock No.	Description
ID34 ID35 ID36 ID37	03111800 or 07176400 03117700 03117700 03111800 or 07176400	1S1588 1S2473HS 10E-2 10E-2 1S1588 1S2473HS
⚠ IR38 ⚠ IR39 ⚠ IR40 ⚠ IR41	46230300 46227800 46227800 46250800	1.2k Ω 1/2W N.I.R. 10 Ω 1/2W N.I.R. 10 Ω 1/2W N.I.R. 1.8k Ω 1/2W N.I.R.
IC31 IC32	00304400 00304400	100μF 16V E.B. 100μF 16V E.B.
IRL1 IRL2	46446400 46446400	Relay, SPEAKERS SYSTEM A Relay, SPEAKERS SYSTEM B
•Transistor ⚠ mQ1 mQ2	03086101 03067401	2SD357 2SC1845
• Diode mD1 mD2	03117700 03117700	10E-2 10E-2
•Zener Diode mDZ1	46105800	05Z24-Y
⚠ mR1 ⚠ mR2	46228400 46230200	33Ω 1/2W N.I.R. 1kΩ 1/2W N.I.R.
<u></u> nR1	46250800	1.8k Ω 1W N.I.R.
	46739500	8P Output Terminal, SPEAKERS
• Diode pD1	03117700	10E-2
<u></u> ↑ pR1	46739900	3.9 Ω 10W Ce.R.
∱ pF1	07189100	5A 250V Power Fuse,
\triangle	07189500	<220/240V > (XX) 10A 250V Power Fuse, <120V >
Δ	07185300	(XX, CSA) 4A 250V Power Fuse, <220/240V > (EU)
↑ pRL1	46222200	Relay, In-rush Prevention

2-13. F-4276 PHONES Jack Board

Component Side

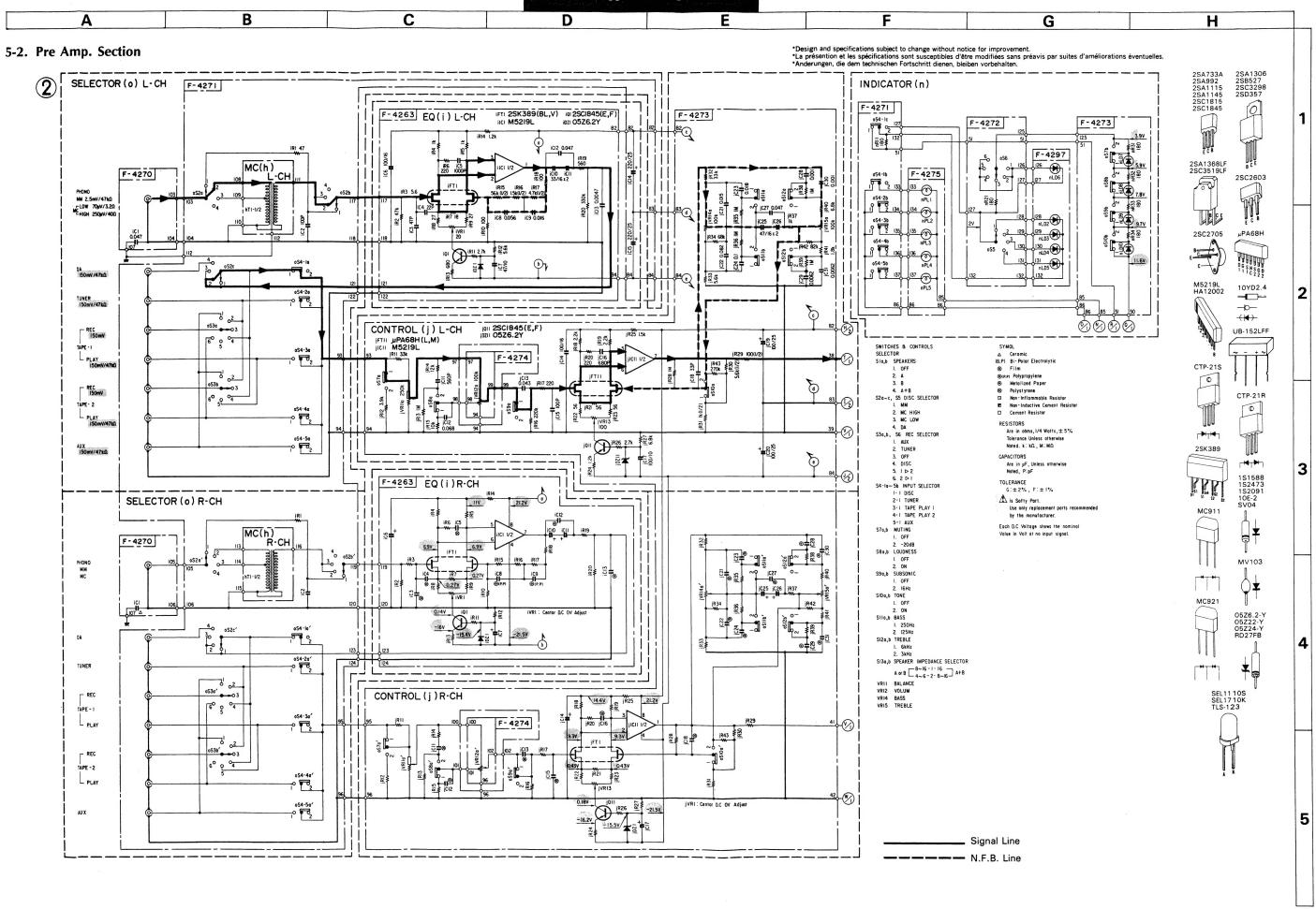


Parts List			
Parts No.	Stock No.	Description	
oJ1	46078200	Jack, PHONES	

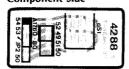
Н G D Α *Design and specifications subject to change without notice for improvement.

*La présention et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.

*Anderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten. 5. SCHEMATIC DIAGRAM 5-1. Power Amp. Section 2SA733A 2SA992 2SA1115 2SA1145 2SC1815 2SC1845 2SA1306 2SB527 2SC3298 2SD357 PROTECTOR (() L-CH SELECTOR (0) F-4288 POWER AMP (k) L-CH #033,35,36 m01,2 IOE-2 m01 2SD357(D,E) m02 2SCI845(E,F) F-4268 F-4287 F-4296 k051,52 2SC1845(E,F) k021 R027F(B)
k053,54 2SC2705(O,Y) k051-54 IS2091
k055,56 2SA1145(O,Y)
k059,50 2SC3298(O,Y)
k059,50 2SA1306 (O,Y)
k061,62 2SC3519(O,P,Y)
k063,64 2SA1386(O,P,Y) 101,3,6,8,9 2SC2603(F,G) 102,4,5,7,10 2SAIII5(E,F) 101 IS2473 kDI,2 MVIO3 kD3 IOYD24(A) kD4~7 SVO4 kFTI UPA68H(L,H)
k01~5 2SC1845(E,F)
k06~9 2SA992(E,F)
k010,11,14,15 2SA1145(0,Y)
k012,13,16,17 2SC2705(0,Y) Φį A kR76 COLD 2SA1368LF 2SC3519LF 470/56 2SC2603 £036 [0] 2637 11V 47750 r F-4266 BCE £R34 68k **3** 47 48 "PA68H 2SC2705 10(2) 0.047 F-4289 M5219L HA12002 10YD2.4 ## ## 100/6.3 x2 #20 10k -b-(||) F-4276 UB-152LFF 10(1/2) 49 4R51 33k kCI 5P CTP-21S 0 CTP-21R 3 8 F-4292 m021 2SD357(D,E) m023 2SC1845(E,F) m022 2SB527(D,E) m0242SA992(E,F) 47k 47k 10k 10k 0 47.k 47.k 10k 10k -**ૐ** 2SK389 F-4287 1S1588 1S2473 1S2091 10E-2 SV04 MC911 120V 60Hz ¥ m023 21.8V 8010 36.5V 35.5V 1011 36.5V 1.85V 9 1.2V K057 (K) to MV103 BROWN O 25.3V kQ2 F-4287 F-4267 ≝∳ Ş†⊗ 12.5V MC921 kg -35V k013 -36V k012 -375V **₹ ₹** RI6 ₩ F-4290 K055 00 01 € -37.5¥ 10.5V 10.50 **X** OV SPOWN 1015 37V 1015 34.5V 1015 134.5V kC i F-4287 PDI 10E-2 SEL1110S SEL1710K TLS-123 IBV E **∆**pSI **1** PRL1 p01 106 0.6V -23V O(1/2) erz € S+⊗ **A** kR25 kR26 kQ8 X09 -37V -1.857 KCII -35.5V KOI7 -36V KOI6 -35.5V 120V,220V,240V 50/60Hz -37V E 1 F-4292 POWER SUPPLY (m) F-4291 moli CTR2IR moli CTR2IS F-4269 pZ2 120V A-D B open C-E 220V B-D C,E open 240V C-D B,E open PROTECTOR (£) R-CH kVRI : HOT COLD D.C OV Adjust kVR2 : HOT Each D.C OV Adjust kVR 51,52 : Bias Current D.C 20mV Adjust Signal Lime POWER AMP (k) R-CH _____ N.F.B. Line

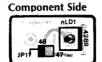


2-14. F-4288 SPEAKERS Selector Board Component Side



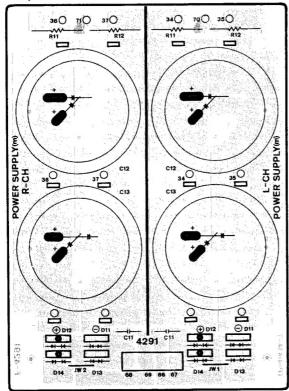
Parts List		
Parts No.	Stock No.	Description
oS1	46730700	Rotary SW., SPEAKERS

2-15. F-4289 PROTECTOR LED Board



Parts List		
Parts No.	Stock No.	Description
nLD1	03193700	LED SEL1110S, PROTECTOR

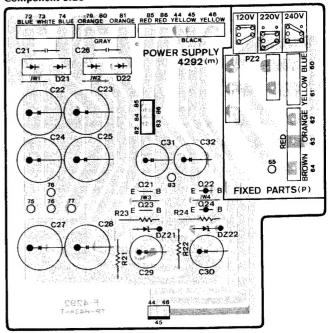
2-16. F-4291 Power Supply Circuit Board Component Side



Parts List		
Parts No.	Stock No.	Description
• Diode		
∆ mD11	46731400	CTP-21R
⚠ mD12	46731500	CTP-21S
mR11	46510500	6.8kΩ 1W C.R.
mR12	46510500	6.8kΩ 1W C.R.
mC11	07287400	0.01µF 630V F.C.
mC12	46729200	10000μF 80V E.C.
mC13	46729200	10000µF 80V E.C.

2-17. F-4292 Power Supply Circuit Board

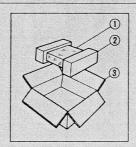
Component Side



Parts List		
Parts No.	Stock No.	Description
Transistor		
<u></u> mQ21	03086101	2SD357
∆ mQ22	03034401	2SB527
mQ23	03067401	2SC1845
mQ24	03010901	2SA992
•Diode		
∆ mD21	07193300	UB-152LFF
∆ mD22	07193300	UB-152LFF
•Zener Diode		
mDZ21	46105500	05Z22-Y
mDZ22	46105500	05Z22-Y
∆ mR21	08921300	4.7Ω 1/2W N.I.R.
ΔmR22	08921300	4.7Ω 1/2W N.I.R.
∆mR23	08924100	1kΩ 1/2W N.I.R.
ΔmR24	08924100	1kΩ 1/2W N.I.R.
mC21	07287400	0.01µF 630V F.C.
mC22	46628500	470µF 50V E.C.
mC23	46628500	470µF 50V E.C.
mC24	46628500	470µF 50V E.C.
mC25	46628500	470μF 50∨ E.C.
mC26	07287400	0.01μF 630V F.C.
mC27	46628500	470μF 50V E.C.
mC28	46628500	470µF 50V E.C.
mC31	46628100	100µF 50∨ E.C.
mC32	46628100	100µF 50∨ E.C.

7. PACKING LIST

Parts No.	Stock No.	Description
.1	91167720	Vinyl Bag
2	47332800	Styrofoam Packing
3	47330200	Carton Case



8. ACCESSORY LIST

Stock No.	Description
46729000 46894400	Operating Instruction Connection Diagram



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